

## REMARKS

Claims 1-5, 7-11 and 13-23 are pending in the present application. Claim 6 was previously canceled and claim 12 is canceled herein. Claims 1-5, 7, 9-11 and 14-23 are amended. No new matter has been added. Applicant respectfully requests reconsideration of the claims in view of the following remarks.

Claim 12 was objected to as not further limiting the scope of the claim from which it depends. In response claim 12 has been canceled. Further, Applicant apologizes for any inconvenience in the misnumbering of the claims filed in the preliminary amendment. The claims have been correctly numbered herein in accordance with the Examiner's assumptions.

Claims 1-5, 8-17 and 19-23 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Kaku (U.S. Patent No. 6,279,097). Claims 7 and 18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kaku. Applicant respectfully traverses these rejections.

Claim 1 had been amended to correct a typographical error and be identical to originally filed claim 6. This claim specifically recites "using  $A_0$  to generate  $y+1$  look-up table addresses  $H_0, H_1, H_2, \dots, H_y$ , where  $y$  is an integer greater than or equal to one, wherein each of the addresses  $H_1, H_2, \dots, H_y$  is obtained from the address  $A_0$  by first forming a respective string  *$A_n$  having the same number of bits as  $A_0$* , and then applying the algorithm by which  $H_0$  is obtained from  $A_0$ ."  
(Emphasis added.) The references of record do not teach or suggest the limitations of claim 1.

In particular, Kaku never teaches or suggests forming a string  $A_n$  having the same number of bits as a MAC address  $A_0$ . In fact, this identical issue was considered by the EPO examiner in the corresponding PCT application. In the IPER, the Examiner stated that

The subject-matter of claim 1 differs mainly from the disclosure of D1 [Kaku] in that each of the addresses  $H_1, H_2, \dots, H_y$  is obtained from the address  $A_0$  by first forming a respective string  $A_n$  having the same number of bits as  $A_0$ , and then applying the algorithm by which  $H_0$  is obtained from  $A_0$ .

This feature solves the technical problem of maximizing the variability in the alternate addresses  $H_1, H_2, \dots, H_y$  in order to provide an available location in the look-up table.

As there is no indication in any of the prior art documents D1-D4, to modify the adaptive address lookup generation method of D1 [Kaku] in order to improve the variability of the alternate addresses, an inventive step is acknowledged to the method disclosed in claim 1.

For the Examiner's convenience, Applicant has provided a copy of the IPER.

It is therefore respectfully submitted that claim 1 is allowable over the references of record.

Claims 2-5, 7, 9 and 11 depend from claim 1 and add further limitations. It is respectfully submitted that these dependent claims are allowable by reason of depending from an allowable claim as well as for adding new limitations.

Claim 8 specifically recites “[a] switch including...a processor for associating MAC addresses with addresses of the look-up table.” The processor is arranged “to use each MAC address  $A_0$  to generate  $y+1$  look-up table addresses  $H_0, H_1, H_2, \dots, H_y$  for  $y$  an integer greater than or equal to one, wherein each of the addresses  $H_1, H_2, \dots, H_y$  is obtained from the address  $A_0$  by first *forming a respective string  $A_n$  having the same number of bits as  $A_0$* , and then applying the algorithm by which  $H_0$  is obtained from  $A_0$ , and according to at least one criterion to associate the address  $A_0$  with a selected one of the addresses  $H_0, H_1, H_2, \dots, H_y$ .” (Emphasis added.) As discussed above with respect to claim 1, it is respectfully submitted that claim 8 is allowable over the references of record.

Claim 10 depends from claim 8 and adds further limitations. It is respectfully submitted that this dependent claim is allowable by reason of depending from an allowable claim as well as for adding new limitations.

Claim 13 specifically recites "generating a second look-up table address by forming a string having the same number of bits as the MAC address and applying the algorithm to the string." Applicant respectfully submits that the references of record do not teach or suggest the limitations of claim 13.

In rejecting claim 13, the Office Action cites to Figs 5A-5B to indicate that if the first address is occupied, then a second/third/fourth address is generated using the string with the algorithm applied. Applicant respectfully submits that Kaku does not teach or suggest generating a second look-up table address by forming a string having the same number of bits as the MAC address and applying the algorithm to the string.

Kaku teaches taking a 48-bit MAC address and compressing the 48-bit input address to generate a 32-bit compressed address. Col. 7, line 20; Fig. 5A, state 62. While this may be considered generating a first look-up table address based upon a MAC, Kaku never then generates a second look-up table address by forming a string having the same number of bits as the MAC address. In particular, Kaku never forms a string having 48 bits. All additional processing is done on, at most, 32-bit strings. Therefore, it is respectfully submitted that claim 13 is allowable over the references of record.

Claims 14-21 depend from claim 13 and add further limitations. It is respectfully submitted that these dependent claims are allowable by reason of depending from an allowable claim as well as for adding new limitations.

Claim 22 specifically recites "if the first look-up table address is not associated with the MAC address, generating a second look-up table address by forming a string having the same number of bits as the MAC address and applying the algorithm to the string." As discussed with respect to claim 13, Kaku does not teach or suggest this limitation.

Claim 23 depends from claim 22 and adds further limitations. It is respectfully submitted that this dependent claim is allowable by reason of depending from an allowable claim as well as for adding new limitations.

Applicant has made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Ira S. Matsil, Applicant's attorney, at 972-732-1001 so that such issues may be resolved as expeditiously as possible. No fee is believed due in connection with this filing. However, should one be deemed due, the Commissioner is hereby authorized to charge, or credit any overpayment, to Deposit Account No. 50-1065.

Respectfully submitted,



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